THERMIC 100

Heat Treatment

DESCRIPTION

THERMIC 100 is a hot quenching oil with a high ignition point, used for quenching of low and medium alloyed steels with complex shapes.

APPLICATIONS

THERMIC 100 hot quenching oil is specially adapted for the following heat treatments:

Cementation-quenching

– Low alloyed steels:
  16 CD 4: tripods
  20 CD 4: ball pivots, steering racks, steering pinions

– Medium alloyed steels:
  20 NCD 2: crown and pinion drives

Carbonitriding

– Low alloyed steels:
  20 CD 4: tulip shafts, driven gearbox shafts, gearbox pinions
  30 CD 4: one-piece shafts, gearbox parts

Continuous hot quenching

– Hard carbon steels:
  XC 48, XC 65, XC 80: strips, sheets

THERMIC 100 is suitable for parts heated in batch type ovens with a protective atmosphere for the quenching tank.

ADVANTAGES

- Reduces strain and crack risks.
- Excellent thermal stability, it oxidized a little under the effect of repeated quenching.
- High quenching speed.
- Uniform results due to a viscosity that does not vary.
- High flash point, which reduces the risk of fire, even when it is used at 180°C.
- Low consumption, due to its fluidity it reduces loss by drag-out.
- THERMIC 100 is approved by PEUGEOT CITROEN and can be recommended for all automotive subcontractors characteristics.

The environmental, health and safety requirements are mentioned on the safety data sheet that is available at www.quickfds.fr
**TECHNICAL INFORMATION**

<table>
<thead>
<tr>
<th>NAME</th>
<th>UNITS</th>
<th>METHOD</th>
<th>THERMIC 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>-</td>
<td>ASTM D1500</td>
<td>Amber</td>
</tr>
<tr>
<td>Density at 20°C (68°F)</td>
<td>-</td>
<td>ISO 12185</td>
<td>0.884</td>
</tr>
<tr>
<td>Viscosity at 40°C (104°F)</td>
<td>mm²/s</td>
<td>ASTM D445</td>
<td>123.0</td>
</tr>
<tr>
<td>Self-Ignition Point</td>
<td>°C</td>
<td>ASTM D92</td>
<td>270.0</td>
</tr>
<tr>
<td>Flash point</td>
<td>°C</td>
<td>ASTM D92</td>
<td>&gt;245</td>
</tr>
<tr>
<td>Storage</td>
<td>-</td>
<td></td>
<td>in frost-free, dry place</td>
</tr>
</tbody>
</table>

These characteristics are given only for information and can be updated over time.

**PROPERTIES**

- Fluid product at temperature of use (about 150°C)
- Stable product between 60°C and 180°C
- Constant quenching capacity
- High wetting properties
- Strong antioxidant characteristics

**SERVICES AND EQUIPMENT**

In addition to its product ranges, MotulTech can provide tools and services for the maintenance and monitoring of your lubricants. Please contact your technical sales representative for more information.